



**U.S. Postal Service
Shared Energy Savings Project
Honolulu P&DC**

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USPS Environmental Program



Step 1 - Form Project Team

Form team with representatives from:

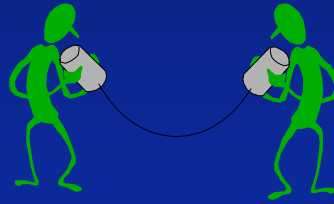
- P&MSC
 - Environmental
 - Finance
 - Maintenance
 - Performance cluster/local office
- Solicit management support





Step 1 - Form Project Team

- Designate evaluation committees
 - Technical evaluation committee
 - Financial evaluation committee
- Establish team protocols





Step 1 - Form Project Team

■ Groups that trust

- Open to exchanging relevant ideas and feelings
- Willing to search for alternative courses of action
- Motivated to implement solutions





Step 1 - Form Project Team

Internal resources

- Local facility head
- Local maintenance
- Finance
- P&MSC
- Area, District Environmental Compliance Coordinator ASO, FSO
- Environmental Management Policy (EMP)



Step 1 - Form Project Team

External resources

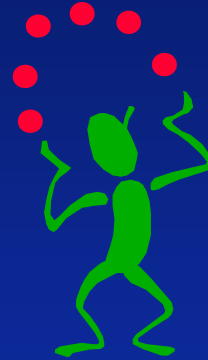
- Utility company
- Energy service company (ESCO)
- Architect engineer (AE)
- Other contractor
- Department of Energy (DOE)
 - Federal Energy Management Program (FEMP)
 - National labs





Step 2 - Identify Project

- **Determine scope:**
 - Single facility
 - Multiple facilities
 - Check facility replacement plans
- **Contact utility company**
 - Define utility company service territory
 - Determine if utility company has an energy-service company (ESCO)





Step 2 - Identify Project

- **Determine square feet (SF)**
 - If single, SF of facility
 - If multiple
 - List of facilities
 - Geographic boundaries
 - Owned vs. leased SF
- **Determine average annual utility costs**
 - Total cost
 - \$ per square foot
- **Calculate preliminary estimated cost and savings**





Step 2 - Identify Project

■ Criteria for Successful Projects

- Teamwork
- Local buy-in
- Utility interest
- Good energy saving opportunities (ESO's)
- Project scope
- Technology
- Number of facilities
- Clear communications





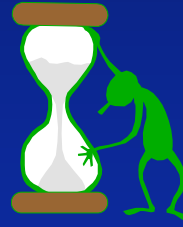
Step 3 - Prepare Justification of Expense

- Discuss potential project with PMSC
- Identify COR and technical and financial evaluation teams
- Prepare Justification of Expense and funding documents
- Obtain approval signatures
- Submit JOE & PS7381 to PMSC



Step 4 - Issue Solicitation

- **Revise standard document to reflect scope of projects**
 - Define technical scope
 - Determine pre-proposal meeting date
 - Establish solicitation due date
 - Include point of contact (CO)

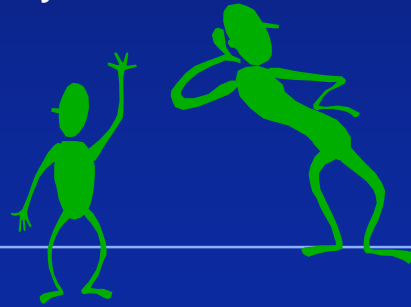




Step 5 - Hold Pre-proposal Conference

Objective: Meet with utility to clarify the project

- Identify protocol
- Conduct pre-proposal conference
- Revise proposal, if necessary



Today as National Energy Coordinator I will discuss with you the topic of Shared Energy Savings

What it is

What we've done in the area of Shared Energy Savings

Where we're going with the concept

and What we are asking of each of you.



Step 5 - Hold Pre-proposal Conference

- Identify protocol
- Conduct pre-proposal conference
- Revise proposal, if necessary



Step 6 - Receive Proposal Submittals

- **CO reviews submittal**
 - Check basic business information
 - Check firm's financial information
 - Check that representations and certifications are satisfactory



Step 6 - Receive Proposal Submittals

- Utility should prepare general management plan (GMP)
 - Planned project schedule
 - Staff resources (resumes)
 - List of contacts



Step 7 - Award Contract

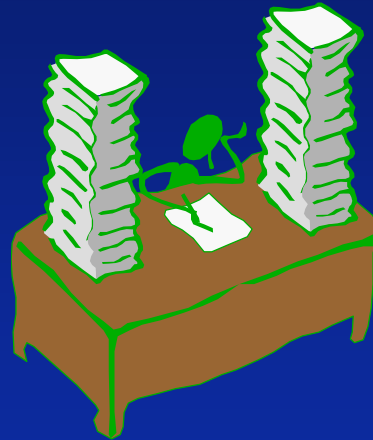
- Contact COR
- Issue award letter
- Issue COR letter
- Communicate with contractor
- Issue PDC commitment document
 - Incidental Costs I.e., Survey





Step 8 - Receive Proposal Submittals

- Preliminary Study
- Feasibility Study
- Design & Engineering Study
- Implementation & Construction





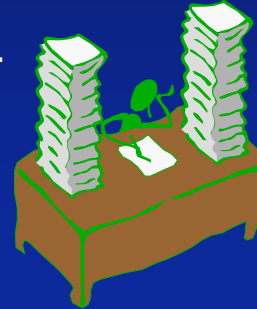
Step 8 - Receive Preliminary Study

- **CO reviews submittal**
 - **Ensure that technical and financial submissions are separate**
 - **Check that project data are clear and complete**
- **CO distributes proposal to technical and financial evaluation committees**



Step 9a - Perform Technical Evaluation

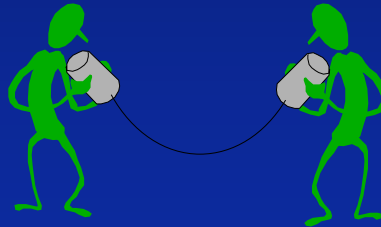
- Assemble technical evaluation team.
- Distribute submittals and protocol to technical evaluation team.
- Review submittal before meeting.





Step 9a - Perform Technical Evaluation

- Meet to perform technical evaluation.
- Transmit technical findings to CO
- Communicate with financial evaluation team





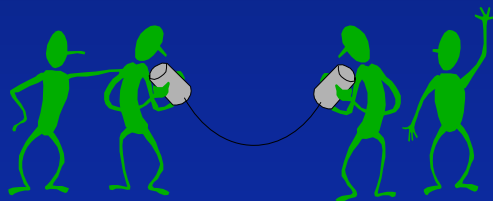
Step 9b - Perform Financial Evaluation

- **Assemble financial evaluation team**
- **Distribute submittals and protocol to financial evaluation team**
- **Review submittal before meeting**



Step 9c - Evaluation Teams Communicate

- Technical and financial evaluation committees conduct joint review.
- Analyze findings (any ECO's rejected?)
- Make final project determination.
- Submit combined recommendations to CO





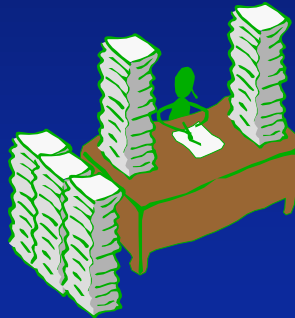
Step 10 - Issue Notice To Proceed

- **Review technical evaluation and financial evaluation findings and recommendations for consistency**
- **Request bonds from contractor**
- **Review Bonds**



Step 10 - Issue Notice To Proceed

- Contact COR
- Issue award letter
- Issue COR letter





Step 10 - Issue Notice To Proceed

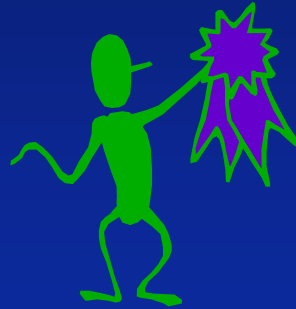
- Communicate with contractor
- Issue formal notice to proceed (NTP)
- Issue PDC commitment document





Step 11 - Monitor & Accept Installation

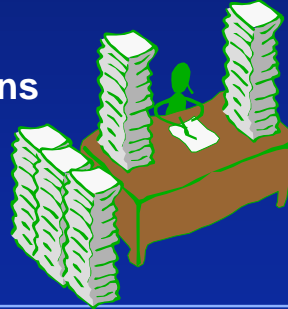
- Inspect work
- Generate punch list (optional)
- Notify CO
- Transfer title
- Warranty





Step 12 - Payment and Monitoring

- Certify invoices
- Process payments
- Monitor savings
- Review termination options





Honolulu Processing & Distribution Center

- 350,000 sq. ft.
- Built in 1972
- 24/7 Operation
- 800-1200 Employees (seasonal)
- Approximately \$125,000/month energy cost



Honolulu Processing & Distribution Center

- Worked closely with HEC
- Several proposals
 - 11 sites
 - P&DC HVAC only
 - P&DC HVAC & lighting, other ECOs



Honolulu Processing & Distribution Center

- Selected P&DC only; several ECOs
 - Lighting
 - Chiller replacement
 - Other ECOs



Honolulu Processing & Distribution Center

- **Replaced 3000+ light fixtures**
 - From Mercury Vapor to T-8 Fluorescent Lamps with Electronic Ballasts
- **Installed 550 Metal Halide High Intensity Discharge lamps with automatic bi-level controls**



Honolulu Processing & Distribution Center

- Replaced R-11 Chiller with high efficiency model
- Other ECOs:
 - Variable Drive Motors
 - Reduced demand by 20%, use half power
- Disposed of PCB ballasts, lamps



Honolulu Processing & Distribution Center

- \$3,100,000 project cost
- Saving 5,442,186 kWh per year(!)
- Saving \$508,516 per year(!)
 - \$42,376 per month
 - \$0.0934 per kWh savings

